



LORAIN COUNTY COMMISSIONERS

LABINFO NEWSLETTER

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This newsletter is provided three times a year by Lorain County Crime/Drug Lab discussing technical information dedicated to local agencies within Lorain County. The information has been collected from various sources and journals.

DACTYLOGRAPHY – SCIENCE OF FINGERPRINT IDENTIFICATION

The concept of fingerprint identification is two-fold. First, no two fingerprints are alike. Nature does not repeat itself. Second, the relative positions of the friction skin characteristics do not change over the course of a person's life.

QUICK GUIDE TO SURFACES LATENT PRINT DEVELOPMENT

SURFACE	TREATMENT METHOD
Smooth, Non-Porous	Powders, iodine, small particle reagent, cyanoacrylate/fluorescent dyes
Rough, Non-Porous	Small particle reagent, cyanoacrylate/fluorescent dyes
Paper & Cardboard	Iodine, ninhydrin, DFO, silver nitrate, physical developer, powders
Plastic Packaging	Iodine, small particle reagent, cyanoacrylate/fluorescent dyes, powders
Soft Vinyl (PVC), Rubber & Leather	Iodine, small particle reagent, cyanoacrylate, powders
Metal (Untreated)	Small particle reagent, powders, cyanoacrylate/fluorescent dyes
Unfinished Wood	Ninhydrin, powders, silver nitrate, physical developer
Wax & Waxed Surfaces	Nonmetallic powders, cyanoacrylate/fluorescent dyes
Adhesive-Coated Surfaces	Adhesive side powders

TERMINOLOGY IN FORENSICS

Source: Evidence Technology Magazine- Written by Edward E. Hueske

When improper terminology is applied to evidentiary items, confusion is introduced that can make it difficult or even impossible to interpret the case at hand.

So what is the solution? The solution is for everyone in the evidence chain of custody to use the correct term for each item collected, in all associated documentation, in departmental policies and procedures, press releases, news conferences, interviews, and court testimony. Some of the examples are listed:

- clip vs. magazine
- projectile vs. intact bullet and fragments
- cartridge vs. bullet
- shotgun shell vs. shot shell
- smoking device vs. pipe
- pills vs. tablet
- green vegetable matter vs. marijuana/spice (assumption)
- residue vs. trace
- bath salts vs. unknown substance

The fundamental principle to keep in mind is simple: "Call it what it is and be as specific as possible. These terms need to be learned and utilized by members of the criminal justice community."

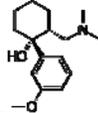
ILLICIT SUBSTANCES CUT WITH DANGEROUS ADDITIVES

Reports of German pot smokers sustained severe lead poisoning from tainted Marijuana (Source: ABC News Medical Unit). Users may be getting more than just a high from the substance they abuse, because of cutting agents added to Marijuana and other illicit drugs, such as, Cocaine, Heroin, etc.

The cases documented in an article issue of the New England Journal of Medicine, involved 29 young adults, ages 16 to 33, who were hospitalized with lead poisoning during a period of several months.

Researchers noted in the article that lead was used to increase the weight of street marijuana to maximize profits among dealers.

Cutting agents are usually found in combination with Heroin, Cocaine and Marijuana. The following are commonly encountered cutting agents identified at the County Crime/Drug Lab: levamisole, fentanyl, lidocaine, caffeine, benadryl, procaine, benzocaine, acetaminophen, and quinine.



TRAMADOL

Source: www.dea.gov

Tramadol is a commonly used pain management medication. As with many pain medications, Tramadol had a potential to be abused. Initially thought to be a non addictive pain medication, it was approved by the FDA in 1995. The DEA has recently announced that Tramadol will be added to the schedule IV controlled substances, effective August 18th 2014. Following suit, the Ohio Board of Pharmacy added it to the schedule IV controlled substance list as of September 1st 2014.

What does it look like? Visit www.drugs.com.

Tramadol is sold under the trade name *Ultram*, but generic tablets are available. Doses are 50 or 100 mg tablets. Tablets are taken orally. Users also abused it by crushing the tablets and snorting the powder.

ABUSE

Users report effects similar to other opioids including feeling euphoric, sedation, nausea, constipation, dizziness and drowsiness.

- In 2011, the drug was linked to 20,000 emergency department visits around the country.
- In 2012, 3.2 million people in the U.S. aged 12 or older used tramadol for nonmedical purposes in their lifetime.
- In 2013, there were 43.8 million Tramadol prescriptions in the United States.

COUNTY CRIME/DRUG LAB ANALYSIS

In the past three years, the laboratory has seen an increase in Tramadol submissions.

2008: 2 cases

2009: 2 cases

2010: 6 cases

2011: 2 cases

2012: 5 cases

2013: 8 cases [including one case of a powder and one case of residue on a baggie]

2014: 2 cases (as of June)

Prepared by: Elizabeth Doyle, Forensic Analyst

HEROIN, COCAINE and MARIJUANA FACTS

LORAIN COUNTY CRIME/DRUG LAB			
Three most common abused illicit drugs analyzed – A comparative study			
2013			
1st Quarter		2nd Quarter	
Heroin	162	Heroin	164
Cocaine	71	Cocaine	146
Marijuana	192	Marijuana	96
2014			
1st Quarter		2nd Quarter	
Heroin	164	Heroin	108
Cocaine	146	Cocaine	89
Marijuana	109	Marijuana	109

DEXTROMETHORPHAN (DXM/DM)

Dextromethorphan is a cough suppressant (antitussive) medication found in numerous over-the-counter cold/cough medications, such as Delsym, Robitussin, Vicks 44, Coricidin-D, etc.

The abuse potential for DXM/DM is a growing trend among adolescents and young adults (especially during flu season- spring and fall), due to its ability in large doses to induce a state of intoxication similar to that of phencyclidine (PCP) abuse. The effects of overdose can include confusion, agitation, impaired coordination, disorientation, distortions of motion or speech, and depersonalization, and can even induce an out of body, dreamy state along with visual hallucinations. Reports have even indicated that users are cutting heroin with DXM/DM to enhance the effects of the drug. DXM/DM may cause false positive urine drug test screen for PCP.

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*The information gathered for this newsletter is not necessarily the opinion of the County Crime/Drug Lab staff.
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